

507.13
P4P6842

ISSN 0097-4463

ANNALS of CARNEGIE MUSEUM

CARNEGIE MUSEUM OF NATURAL HISTORY

4400 FORBES AVENUE • PITTSBURGH, PENNSYLVANIA 15213

VOLUME 50

14 APRIL 1981

ARTICLE 1

SHOSHONI BROWNWARE FROM GRASS VALLEY, NEVADA

COLLEEN M. BECK¹

Postdoctoral Fellow, Section of Man

ABSTRACT

A survey of 56 archaeological sites produces evidence that Shoshoni Brownware ceramics are common below the pinyon-juniper ecozone in Grass Valley, Nevada. Analysis of the large ceramic collection from these sites provides additional information about Shoshoni ceramic technology and style.

INTRODUCTION

The three pottery wares of the Shoshonean tradition, as defined by Tuohy (1965) and Coale (1963), that were manufactured in the Great Basin during prehistoric and protohistoric times are Shoshoni Brownware, Southern Paiute Utility Ware, and Owens Valley Brownware. Shoshoni Brownware has been found in central and eastern Nevada, Utah, Idaho, Wyoming, and Montana (Fowler, 1968*b*:11). Southern Paiute Utility Ware is known from southeastern Nevada, southern Utah, and northwestern Arizona (Fowler, 1968*b*:12). Owens Valley Brownware was made east of the Sierra Mountain Range in the Owens Valley and adjacent regions (Riddell, 1951:20-23; Elsasser, 1960:30). All three of these wares share common features such as "a dull brown finish, obliterated coils, and wiping marks" (Tuohy, 1965:62). Variations between the wares occur in the vessel shapes and decoration.

¹ Present address: Agency for Conservation Archaeology, Eastern New Mexico University, Portales, NM 88130.

Submitted 9 May 1980.



Fig. 1.—Map of Nevada showing location of Grass Valley.

Unfortunately most finds of the Shoshonean tradition ceramics consist of only a handful of sherds. Large collections are rare because the pottery does not preserve well. Besides fracturing easily, some pieces are so low fired, if fired at all, that they decompose in the rains. A further complication is the color of the ceramics. The brown, unpainted surface blends into the color of many soils and cannot be seen. Because most archaeological sites in the Great Basin are surface scatters, only rarely is the pottery recovered during the excavation of a stratified midden deposit.

A direct result of this situation is a fragmentary understanding of the age, exact distribution of the different Shoshonean tradition ceramics, the types of vessels, and the nature of their manufacture and use. In

fact the discovery of Shoshoni Brownware in Grass Valley, Nevada, by Molly Magee Knudtsen, was the first find of Shoshoni ceramics in central Nevada (Magee, 1964). In order to preserve the data, Molly Knudtsen systematically recorded the archaeological sites and collected the artifacts that were exposed on the surface of the sites.

During the summer field seasons of 1972 and 1973, the author joined the multi-faceted archaeological research program, directed by C. W. Clewlow, Jr., and Richard D. Ambro, which has been conducting archaeological investigations in Grass Valley since 1969 (Clewlow and Rusco, 1972; Clewlow et al., 1978). The valley has merited continuous investigation because: 1) it had a long, continuous, aboriginal occupation from prehistoric into historic times; and 2) most of the archaeological sites are very well preserved and have not been disturbed due to the vigilance of M. M. Knudtsen. The data presented in this paper are the result of research which focused on recording the pottery sites and analyzing the associated ceramics.

Setting

Grass Valley is located in Lander and Eureka counties, 26 mi northeast of Austin in central Nevada (Fig. 1). The valley, which runs slightly northeast-southwest, is about 40 mi long and reaches a maximum width of 10 mi. It is bounded on the north by the Cortez Mountains, on the east by the Simpson Park Range and on the west by the Toiyabe Range which has a maximum elevation slightly over 10,000 ft (Fig. 2).

As its name implies, Grass Valley is one of the richer biotic regions in the Great Basin. Mountain streams bring large amounts of perennial water to the valley floor; cold springs are common in the lower foothills; and hot springs dot the valley floor. The diversity of flora and fauna must have created a hospitable environment for aboriginal habitation. On the west side of the valley the pinyon-juniper zone does not extend below 6800 ft except at the northern end near Cortez. On the east side, however, the pinyon-juniper zone extends as low as 6200 ft in areas such as McClusky Creek and Wood Canyon. In the lower foothills of the mountains where pinyon and juniper trees are absent, service berries, aspens and willows parallel perennial streams, such as Skull Creek.

The valley floor ranges in elevation between 5600 and 6200 ft. The northern end of the valley is covered by a large, dry lake bed called a playa lake. Most of the southern end of the valley is either under cultivation or used to graze cattle and horses. Formerly, the entire region, both the valley floor and mountains, was used by Basque herders to graze their sheep. Today the uncultivated plants in this zone are sagebrush, rabbitbrush, greasewood, Great Basin rye, hologeton, and salt brush. Along the creeks grow various grasses and tule reeds.

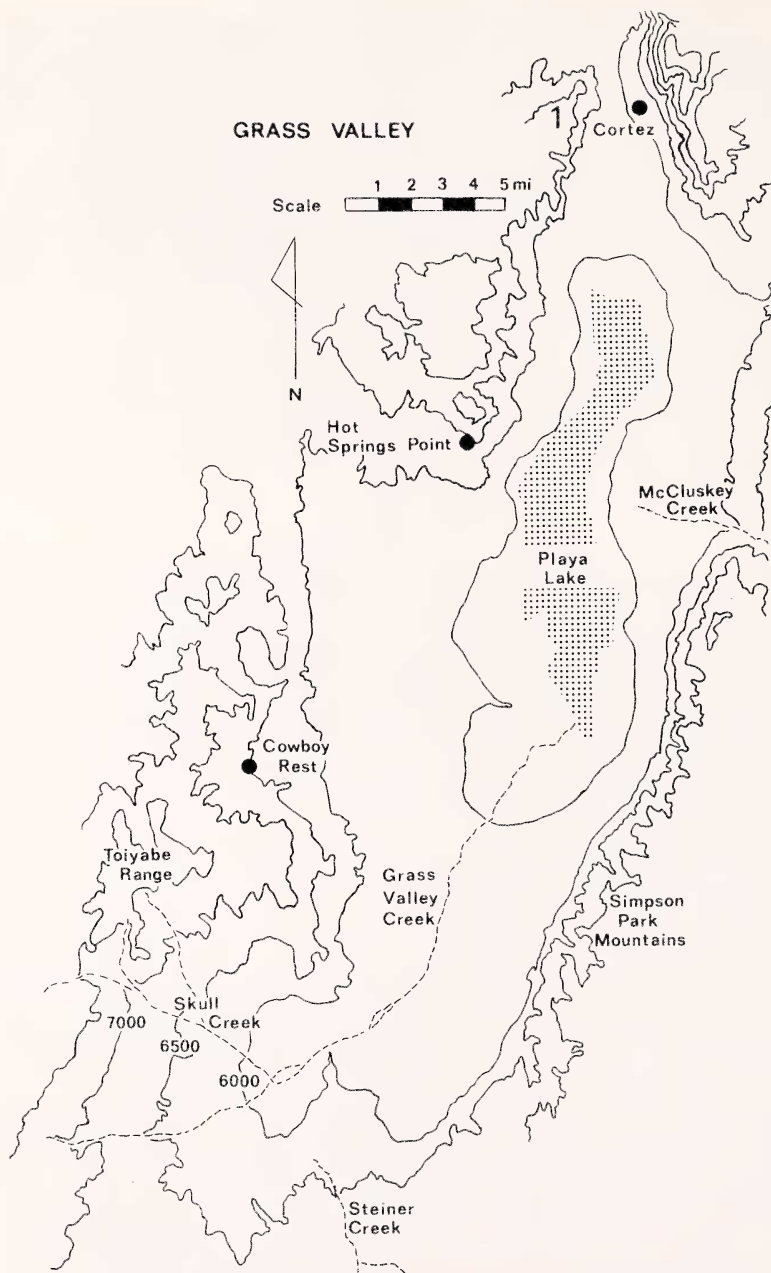


Fig. 2.—Map of Grass Valley, Nevada.

SITE SURVEY

Fifty-seven archaeological sites with Shoshoni Brownware were surveyed in 1972 and 1973. Fifty-six of the sites were located in Grass Valley and one site was at the northern end of the Great Smokey Valley. Fifty-five of the sites had been previously recorded and collected by Molly Magee Knudtsen. The two remaining sites were discovered by the Grass Valley Archaeological Project.

The purpose of the survey was to record the ecozone location and to determine the cultural components of each site. Therefore, the sample was limited to known pottery bearing sites and is not the result of a stratified, sampling procedure. Instead, the sample reflects the areas visited by Molly Knudtsen and the zones surveyed by the Grass Valley Archaeological Project.

Site Types

The classification of the sites is a modified version of the site categories proposed by Fowler (1968a:9) for the Great Basin. He divided sites into seven categories: 1) chipping stations, 2) gathering sites, 3) campsites, 4) quarry sites, 5) village sites, 6) rockshelters, and 7) petroglyph panels. Quarry, rockshelter, and petroglyph panel were not applicable to the sites in this survey. Fowler defines three of the other four as follows: 1) chipping station—a site with no cultural deposit, only flakes and chipped stone implements; 2) gathering site—a site in the pinyon-juniper zone where seeds and roots could be procured, or a site near grasses; 3) campsite—a site with hearths and cultural deposit. Fowler does not present a definition of a village site. Certain problems arise between the application of chipping station and gathering site to the Grass Valley situation. Following the divisions above, the presence of pottery would immediately place a site in the gathering category because a chipping station has only flakes and chipped stone implements. In many instances, however, sherds were associated only with debitage and it is possible that the vessels do not reflect gathering activities at the site. When all other cultural remains point to a chipping station, the site is categorized as a chipping-gathering station. Sites without hearths but with ground stone implements, manos and metates, are considered to be gathering sites. When hearths and other cultural debris are present, the site is a camp. A village is a site with several permanent dwellings, hearths and assorted cultural remains. An isolated site refers to a location where the sherds are not associated with any other cultural remains.

Description of the Sites

A brief description of the location, components and previously published information on each site is presented below. The location of site #1 is shown in Fig. 2, sites #2-56 are on Fig. 3, and site #57 is located south of Grass Valley. Table 1 summarizes this information as well as categorizing the type of artifacts at each site. Most of the artifacts are self-explanatory. However, trade goods refer to items, such as beads, in a situation where contact with the migrating, non-aboriginal population probably was still indirect; house rings refer to the foundations of permanent structures; and historic artifacts include horseshoes, harmonicas, and metal implements indicative of the historic period.

1. *Cortez Canyon*.—The site is a prehistoric camp, situated near a spring at the lower limits of the pinyon-juniper zone.

2. *Hot Springs Point*.—This isolated sherd scatter is near a group of hot springs, west of the playa lake on the valley floor.

3-7. *McCluskey Creek A, B, C, D, E*.—All five sites are prehistoric camps or gathering sites on the McCluskey Creek drainage and the Sage Hen Canyon tributary in the pinyon-juniper zone. McCluskey Creek D was described by Magee (1967:226) and incorrectly located in Wood Canyon instead of Sage Hen Canyon. McCluskey Creek E

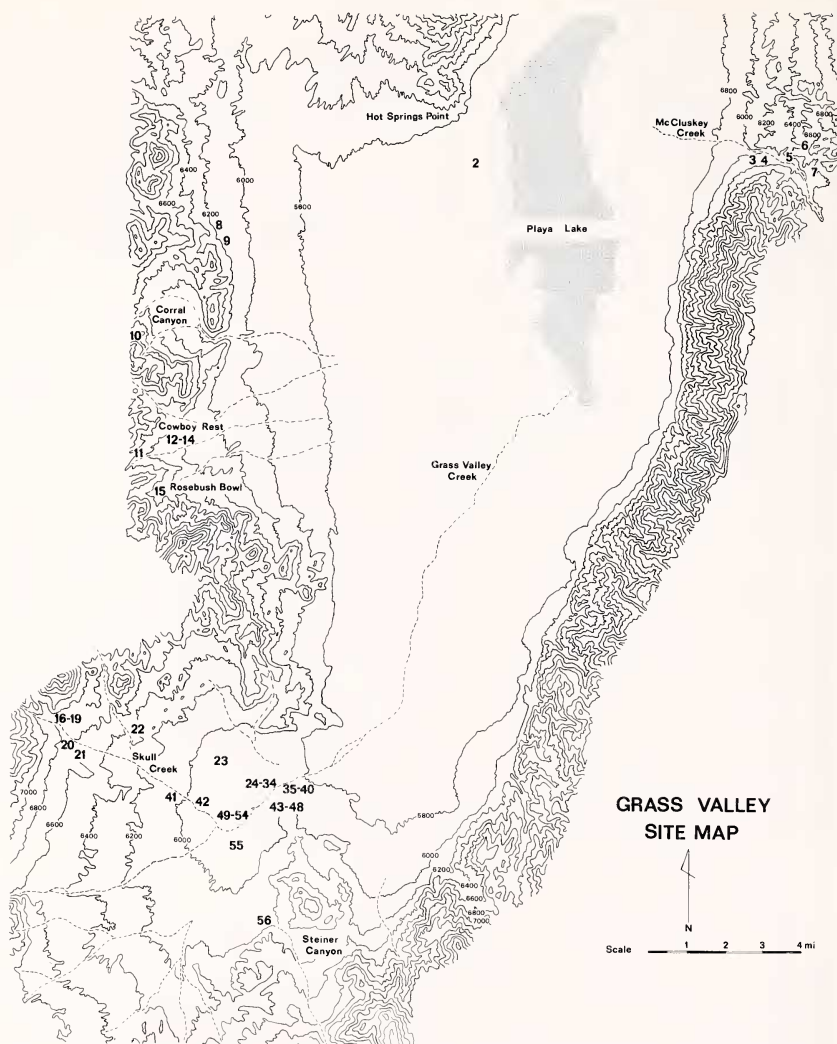


Fig. 3.—Map of southern two-thirds of Grass Valley, Nevada, showing the locations of the archeological sites.

also was discussed in the same article and was referred to as Baumann Pottery Site 2 (1967:226).

8-9. *Stink Hole A, B*.—The Stink Hole sites are north of Corral Canyon on the valley floor, adjacent to the foothills. At both of these sites the sherds were associated with hearths and flaked, stone tools, indicating a camp site.

10. *Corral Canyon*.—This isolated surface scatter of sherds is in the pinyon-juniper zone near a spring and annual stream.

11–14. *Cowboy Rest A, B, C, D.*—These four sites are prehistoric chipping-gathering stations along Cowboy Rest Creek. Only Cowboy Rest A (#11) is in the pinyon-juniper zone. Several other prehistoric hunting and gathering sites are known along Cowboy Rest Creek and Canyon (Clewlow and Pastron, 1972:23, Fig. 3; 25, Fig. 5).

15. *Rosebush Bowl Canyon.*—This is an isolated surface scatter of sherds in the pinyon-juniper zone. In the vicinity are several prehistoric hunting and gathering sites (Clewlow and Pastron, 1972:23, Fig. 3; 25, Fig. 5).

16–19. *Skull Creek A, B, C, D.*—All four sites are prehistoric chipping-gathering stations, located along the north side of Skull Creek in the vicinity of a spring. Also in the area are a prehistoric gathering site (Clewlow and Pastron, 1972:25, Fig. 5) and a rockshelter investigated by Pastron (1972).

20–21. *Skull Creek E, F.*—These two prehistoric chipping stations are on the south side of Skull Creek, near prehistoric hunting and gathering sites (Clewlow and Pastron, 1972:23, Fig. 3; 25, Fig. 5).

22. *Skull Creek G.*—The site is a chipping-gathering station on the North Fork of Skull Creek, near a rockshelter occupied in prehistoric times (Pastron, 1972).

23. *Pottery Hill B.*—Pottery Hill is a three component occupation site (prehistoric, protohistoric, and historic) on the valley floor. Various aspects of the occupation have been discussed by Payen (1978) and Rosen (1978). In the literature Pottery Hill is divided into Pottery Hill 1 and 2 which correlate with Pottery Hill A and B in this paper. Sherds from Pottery Hill A were sent to the Smithsonian Institution over a decade ago. Because these sherds were not available for analysis, they are not included in this report.

24–34. *Grass Valley Creek A, B, C, D, E, F, G, H, I, J, K.*—All of these sites are scattered along the north side of Grass Valley Creek in areas disturbed by cultivation or used to pasture horses. Except for G, which is an isolated sherd scatter, evidence of prehistoric activity is in the form of chipping-gathering stations or gathering sites; the sites' locations near the Horse Pasture Village (Clewlow et al., 1972) support a prehistoric date for the remains.

35–40. *Grass Valley Creek L, M, N, O, P, Q.*—These six sites are south of Grass Valley Creek and have been disturbed by cultivation and herding. Only site P was an isolated sherd scatter. Site N was associated with chippage and trade goods and probably is protohistoric. L, M, O, and Q are prehistoric surface scatters with chippage; M, in addition, had an occupation with flaked stone tools, ground stone tools and a hearth.

41. *Old Skull Creek Village.*—Old Skull Creek Village is a prehistoric occupation site, south of Skull Creek. Artifacts at the site include chippage, flaked and ground stone tools, and house foundations.

42. *Dead Pile Village.*—Dead Pile Village is north of Skull Creek and is a multicomponent site with a prehistoric, protohistoric and historic occupation comprised of chippage, flaked and ground stone tools, hearths, trade goods, house foundations, and historic artifacts (Bouey, 1979; Wallof, 1978).

43–48. *Rocky Point A, B, C, D, E, F.*—Rocky Point, as its name indicates, is a rocky hill which projects onto the valley floor and is littered with prehistoric remains that suggest hunting activities in the area (Clewlow and Pastron, 1972:23, Fig. 3). These six sites vary between chipping-gathering stations, gathering sites, and camps.

49–54. *Grass Valley Tom A, B, C, D, E, F.*—The Grass Valley Tom sites are on the valley floor east of Dead Pile Village, between Skull Creek and Grass Valley Creek. Grass Valley Tom A is also known as Grass Valley Tom's Village and has been discussed by Magee (1964:97), Hector (1978), and Rosen (1978). Grass Valley Tom's Village A is a three component site with a prehistoric, protohistoric, and historic occupation which produced a wide range of artifacts—chippage, ground stone tools, hearths, house foundations, and trade goods. Grass Valley Tom B, E, and F are associated with chippage; and Grass Valley Tom C and D are isolated sherd scatters.

57. *Cahill Canyon.*—The Cahill Canyon site is south of Grass Valley at the north end of the Great Smokey Valley. The site is located in the pinyon-juniper zone. Chippage

Table 1.—*Site description: number, type, cultural remains, and age. Abbreviations: Jp—juniper-pinyon zone; Cg—chipping and gathering station; Ga—gathering site; Ca—campsite; Vi—village; Is—isolated site; c—chippage; f—flaked stone tools; g—ground stone tools; h—hearth; t—trade goods; r—house rings; hi—historic artifacts.*

Site no. and name	Type	Prehistoric	Historic
1. Cortez Canyon (Jp)	Ca	c, f, h	—
2. Hot Springs Point	Is	—	—
3. McCluskey Creek A (Jp)	Ca	c, f, g, h	—
4. McCluskey Creek B (Jp)	Cg	c, f	—
5. McCluskey Creek C (Jp)	Ga	c, f, g	—
6. McCluskey Creek D (Jp)	Ca	c, f, g, h	—
7. McCluskey Creek E (Jp)	Cg	c	—
8. Stink Hole A	Ca	c, f, h	—
9. Stink Hole B	Ca	c, f, h	—
10. Corral Canyon (Jp)	Is	—	—
11. Cowboy Rest A (Jp)	Cg	c, f	—
12. Cowboy Rest B	Cg	c	—
13. Cowboy Rest C	Cg	c	—
14. Cowboy Rest D	Ga	c, f, g	—
15. Rosebush Bowl (Jp)	Is	—	—
16. Skull Creek A	Cg	c, f	—
17. Skull Creek B	Cg	c, f	—
18. Skull Creek C	Cg	c, f	—
19. Skull Creek D	Cg	c, f	—
20. Skull Creek E	Cg	c, f	—
21. Skull Creek F	Cg	c, f	—
22. Skull Creek G	Cg	c, f	—
23. Pottery Hill B	Vi	c, f	r, t, hi
24. Grass Valley Creek A	Cg	c, f	—
25. Grass Valley Creek B	Ga	c, f, g	—
26. Grass Valley Creek C	Cg	c	—
27. Grass Valley Creek D	Ga	c, f, g	—
28. Grass Valley Creek E	Cg	c	—
29. Grass Valley Creek F	Ga	c, g	—
30. Grass Valley Creek G	Is	—	—
31. Grass Valley Creek H	Cg	c, f	—
32. Grass Valley Creek I	Cg	c	—
33. Grass Valley Creek J	Ga	c, f, g	—
34. Grass Valley Creek K	Cg	c	—
35. Grass Valley Creek L	Cg	c	—
36. Grass Valley Creek M	Ca	c, f, g, h	—
37. Grass Valley Creek N	Cg	c	t
38. Grass Valley Creek O	Cg	c	—
39. Grass Valley Creek P	Is	—	—
40. Grass Valley Creek Q	Cg	—	—
41. Old Skull Creek Village	Vi	c, f, g, h, r	—
42. Dead Pile Village	Vi	c, f, g, r	g, r, t
43. Rocky Point A	Ca	c, g, h	—
44. Rocky Point B	Cg	c, f	—
45. Rocky Point C	Ga	c, g	—
46. Rocky Point D	Ca	c, f, g	—

Table 1.—*Continued.*

Site no. and name	Type	Prehistoric	Historic
47. Rocky Point E	Cg	c	—
48. Rocky Point F	Cg	c	—
49. Grass Valley Tom A	Vi	c, f, g, h, r	g, r, t, hi
50. Grass Valley Tom B	Cg	c	—
51. Grass Valley Tom C	Is	—	—
52. Grass Valley Tom D	Is	—	—
53. Grass Valley Tom E	Cg	c	—
54. Grass Valley Tom F	Cg	c	—
55. Ridge Village South	Vi	c, f, g	g, r, t, hi
56. Steiner Canyon	Cg	c	—
57. Cahill Canyon (Jp)	Cg	c, f	—

and flaked stone tools accompanied the sherds. Although this site is outside of Grass Valley, it has been included in the ceramic analysis in this report because the sherds comprise part of Molly Knudtsen's collection.

Since the survey of these sites, another pottery site in Grass Valley was discovered and subsequently described by Deatrick (1978). This site is located somewhere along Skull Creek. The data indicate that the site was a gathering site or a camp, but it is not included in this discussion as primary data because the author has not seen the site or the sherds.

Site Distribution

In spite of the limitations of the sample which were mentioned earlier, the distribution of the pottery sites by ecozone location and type raises interesting questions.

In terms of ecozone location, 47 (84%) of the sites in Grass Valley are below the pinyon-juniper zone. Only nine sites (16%) are in the pinyon-juniper zone. These sites are as follows: 1) Cortez Canyon (#1); 2) McCluskey Creek A (#3); 3) McCluskey Creek B (#4); 4) McCluskey Creek C (#5); 5) McCluskey Creek D (#6); 6) McCluskey Creek E (#7); 7) Corral Canyon (#10); 8) Cowboy Rest A (#13); 9) Rosebush Bowl (#15). The McCluskey Creek sites are near a perennial stream and the other sites are in the vicinity of cold water springs. All of these sites were prehistoric and the pottery was associated with chippage, flaked stone tools, ground stone tools, and in certain cases, hearths.

The most frequent type of site in Grass Valley is a chipping-gathering station. The 29 sites in this category comprise slightly over half the sample (57%). The chipping-gathering station is a locality where an activity related to hunting occurred, possibly repeatedly over a long period of time. The gathering aspect of the site is based solely upon the presence of pottery. However, it would have been much easier to place seeds, roots and nuts in a lighter more portable container made of hide or reeds. Lack of ground stone tools negates processing as a major activity at these sites. This frequent association of pottery with chippage and flaked stone tools suggests the possibility that the vessels contained water and food and may not indicate gathering activities. Nevertheless, such an endeavor cannot be entirely ignored, but a sherd should not always equal gathering activities when found outside a camp or village context. It, first and foremost, is a food container and it is possible that pots were left at such stations for use when the people returned.

As far as ecozone location, three chipping-gathering stations (10%) were in the pinyon-

Table 2.—*Distribution of sherds per site in Grass Valley, Nevada. Surface area given in square cm and weight in g.*

Site name and no.	Surface area	Weight	Rims	Bases	Body	Total
1. Cortez Canyon	420	524.7	—	—	32	32
2. Hot Springs Point	252	202.0	—	—	103	103
3. McCluskey Creek A	64	84.7	1	2	5	8
4. McCluskey Creek B	300	325.9	5	—	41	46
5. McCluskey Creek C	90	83.2	—	—	17	17
6. McCluskey Creek D	600	634.4	12	—	41	53
7. McCluskey Creek E	483	566.0	5	3	49	57
8. Stink Hole A	48	41.9	—	—	1	1
9. Stink Hole B	48	43.7	2	—	7	9
10. Corral Canyon	30	26.9	—	—	5	5
11. Cowboy Rest A	160	127.3	11	—	12	23
12. Cowboy Rest B	90	68.8	2	—	10	12
13. Cowboy Rest C	351	144.4	7	—	61	68
14. Cowboy Rest D	12	17.4	—	—	1	1
15. Rosebush Bowl	15	75.4	—	1	1	2
16. Skull Creek A	48	29.0	—	—	11	11
17. Skull Creek B	44	18.5	—	—	6	6
18. Skull Creek C	52	43.2	—	—	3	3
19. Skull Creek D	24	22.7	—	—	6	6
20. Skull Creek E	338	220.15	—	—	28	28
21. Skull Creek F	400	276.2	4	2	80	86
22. Skull Creek G	4	2.9	—	—	1	1
23. Pottery Hill B	121	78.0	1	3	13	17
24. Grass Valley Creek A	90	134.1	16	—	20	36
25. Grass Valley Creek B	72	73.4	—	—	19	19
26. Grass Valley Creek C	342	209.3	2	—	79	81
27. Grass Valley Creek D	10	17.6	—	—	12	12
28. Grass Valley Creek E	49	48.1	3	—	12	15
29. Grass Valley Creek F	10	12.9	1	—	1	2
30. Grass Valley Creek G	740	694.1	—	3	153	156
31. Grass Valley Creek H	270	170.8	5	—	48	53
32. Grass Valley Creek I	64	74.1	2	1	13	16
33. Grass Valley Creek J	100	69.5	4	—	23	27
34. Grass Valley Creek K	540	483.3	—	—	233	233
35. Grass Valley Creek L	45	35.4	—	—	9	9
36. Grass Valley Creek M	195	154.0	—	—	46	46
37. Grass Valley Creek N	120	89.1	—	—	46	46
38. Grass Valley Creek O	684	702.4	13	4	97	114
39. Grass Valley Creek P	990	869.7	3	—	228	231
40. Grass Valley Creek Q	6	12.3	—	—	4	4
41. Old Skull Creek Village	976	825.2	23	—	256	279
42. Dead Pile Village	864	585.8	5	5	291	301
43. Rocky Point A	1474	1229.1	2	—	197	199
44. Rocky Point B	195	181.3	1	—	18	19
45. Rocky Point C	195	147.2	—	—	23	23
46. Rocky Point D	72	66.5	—	—	8	8
47. Rocky Point E	40	22.1	1	—	6	7
48. Rocky Point F	90	69.7	—	—	8	8

Table 2.—*Continued.*

Site name and no.	Surface area	Weight	Rims	Bases	Body	Total
49. Grass Valley Tom A	1240	1510.3	8	15	510	533
50. Grass Valley Tom B	420	308.6	—	—	186	186
51. Grass Valley Tom C	255	203.7	3	—	53	56
52. Grass Valley Tom D	132	76.5	2	—	38	40
53. Grass Valley Tom E	238	142.5	2	—	63	65
54. Grass Valley Tom F	24	19.5	—	—	3	3
55. Ridge Village South	28	25.3	—	—	4	4
56. Steiner Canyon	25	46.2	—	—	48	48
57. Cahill Canyon	420	524.7	7	—	32	39
Total	15,009	13,646.05	153	39	3321	3513

juniper zone and 26 (90%) were below the pinyon-juniper zone. These statistics indicate three things. First, the region probably has suffered defoliation. Second, the number of sites near or on the valley floor suggest hunting along streams where animals could feed on grasses and drink water. Third, preparation for hunting activities frequently occurred in these zones, near the permanent settlements on the valley floor.

The eight gathering sites comprise 14% of the sample. Because metates are not easily portable items, the presence of the tools indicates the locality was used to process food. Only one (13%) gathering site was in the pinyon-juniper zone and seven (87%) were on the valley floor. It is logical that the processing would take place near the permanent or semipermanent settlements and a water source.

Camp sites are 12.5% of the sample. Only one of the seven camp sites, Grass Valley Creek M (#36), had ground stone tools in addition to the chippage, flaked stone tools, and hearths. Because a camp indicates temporary residence, it is interesting that five of the camps (63%) occurred below the pinyon-juniper zone and three (37%) of the camps were in the pinyon-juniper zone. This situation suggests small, mobile groups moving throughout the region. The pottery in a camp could have been used for cooking, storage of food, and possibly gathering.

Village sites comprise 9% of the pottery bearing sites. Four (80%) of the five village sites had prehistoric, protohistoric, and historic occupations. The other one, Old Skull Creek Village, was a single component prehistoric site. These five villages were built on the valley floor. This is not surprising because the zone provides a large, clear area for numerous structures near a permanent water source. The historic occupations also benefited from their proximity to the ranch house. The vessels in a village could have been used for any number of activities.

There were only seven isolated sherd scatters (12.5% of the sites). Usually an isolated sherd scatter marks the place where a vessel broke beyond repair.

In summary, eight of the sites in the pinyon-juniper zone were prehistoric and two were isolated scatters. In the lower foothills and on the valley floor, 42 sites had a prehistoric component, four had an historic component and five were isolated.

It is difficult, if not impossible, to generalize on site distribution trends with a biased sample. When a summary of the locations of all the sites in Grass Valley is available, it will be possible to present a clear idea of the indigenous population's activities.

Nevertheless, the data from the survey do demonstrate that Shoshoni pottery often was used at chipping-gathering stations, gathering sites, camps, and villages. The repeated incidence of fragile, ceramic vessels at sites with seasonal or temporary occu-

Table 3.—*Distribution of the types of temper in pottery from Grass Valley, Nevada. Type 0 = no temper present; Type 1 = mica; Type 2 = small sand particles; Type 3 = coarse sand particles; Type 4 = mica, quartzite; Type 5 = mica, quartzite, coarse sand; Type 6 = small granitic particles; Type 7 = medium granitic particles; Type 8 = coarse granitic particles.*

Site name and no.	Types								
	0	1	2	3	4	5	6	7	8
1. Cortez Canyon									x
2. Hot Springs Point									x
3. McCluskey Creek A							x		
4. McCluskey Creek B								x	
5. McCluskey Creek C								x	
6. McCluskey Creek D	x								
7. McCluskey Creek E									x
8. Stink Hole A									x
9. Stink Hole B	x								
10. Corral Canyon			x						
11. Cowboy Rest A									x
12. Cowboy Rest B	x								
13. Cowboy Rest C			x						
14. Cowboy Rest D	x								
15. Rosebush Bowl	x								
16. Skull Creek A							x		
17. Skull Creek B					x				
18. Skull Creek C							x		
19. Skull Creek D							x		
20. Skull Creek E							x		
21. Skull Creek F							x		
22. Skull Creek G							x		
23. Pottery Hill B							x		
24. Grass Valley Creek A	x								
25. Grass Valley Creek B							x		
26. Grass Valley Creek C					x				
27. Grass Valley Creek D	x								
28. Grass Valley Creek E									x
29. Grass Valley Creek F									x
30. Grass Valley Creek G							x		
31. Grass Valley Creek H			x						
32. Grass Valley Creek I							x		
33. Grass Valley Creek J		x							
34. Grass Valley Creek K			II						I
35. Grass Valley Creek L							x		
36. Grass Valley Creek M	x								
37. Grass Valley Creek N					x				
38. Grass Valley Creek O	x								
39. Grass Valley Creek P	x								
40. Grass Valley Creek Q	x								
41. Old Skull Creek Village			I						II-III
42. Dead Pile Village							x		
43. Rocky Point A			x						
44. Rocky Point B			x						

Table 3.—*Continued.*

Site name and no.	Types								
	0	1	2	3	4	5	6	7	8
45. Rocky Point C						x			
46. Rocky Point D				x					
47. Rocky Point E								x	
48. Rocky Point F							x		
49. Grass Valley Tom A							x		
50. Grass Valley Tom B							x		
51. Grass Valley Tom C	x								
52. Grass Valley Tom D		x							
53. Grass Valley Tom E		x							
54. Grass Valley Tom F			x						
55. Ridge Village South			x						
56. Steiner Canyon		x							
57. Cahill Canyon									x
Total	12	4	9	1	3	1	16	3	10

pations suggests that the Shoshoni may have left the pottery at these locales as they did metates, for later use. It should always be kept in mind that the presence of sherds and vessels represents the breaking of the pot or abandonment. Therefore, pottery may have been used frequently at sites, such as chipping-gathering stations, but may only rarely show up in the archaeological record.

Of greater importance is the number of pottery sites below the pinyon-juniper ecozone. Although further survey in the forested areas may reveal more pottery sites, the large number of sites in the lower foothills and on the valley floor raise the possibility that the settlement patterns in Grass Valley may be very different from the patterns in the Reese River Valley, where the majority of sites with pottery were located in the pinyon-juniper ecozone (Thomas 1970:697).

CERAMIC ANALYSIS

The 57 archaeological sites produced 3513 sherds. Of this total, 153 are rim sherds, 39 are base sherds, and 3321 are body sherds. The number of sherds per site varies from one to 533. This statistic is only a general gauge of the sample because sherd size in this collection ranged from 1 cm² to 81 cm². In order to present a clearer idea of the sample, the surface area and weight of the sherds from each site are shown in Table 2, as well as the number of rim sherds, base sherds and body sherds. Total surface area of the 3513 sherds is 15,009 cm² and total weight is 13,646.05 g. By comparing the surface area to weight it is possible to see that the pottery falls into two categories—light and heavy sherds. When the surface area is smaller than the weight, the pottery is heavy; when the surface area is greater than the weight the pottery is light. This correlates with the varying thickness

Table 4.—*Coils in pottery from Grass Valley, Nevada.*

Site	Cracks	Coil size
7. McCluskey Creek E	x	1.1–1.8 cm
15. Rosebush Bowl	x	1.2–2.1 cm
20. Skull Creek E	x	1.0–1.5 cm
21. Skull Creek F	x	—
31. Grass Valley Creek H	x	—
32. Grass Valley Creek I	x	—
38. Grass Valley Creek O	x	1.2 cm
39. Grass Valley Creek P	x	1.2–2.5 cm
41. Old Skull Creek Village	x	—
42. Dead Pile Village	x	.8–1.3 cm
44. Rocky Point B	x	—
57. Cahill Canyon	x	—

of the sherds, particularly the bases which are the heaviest part of a vessel.

Due to the large size of the sample, construction features will be discussed in general terms with tables showing the variations among the sites. The division by site is not arbitrary. The sherds from each of the sites showed a remarkable lack of internal variation with the exception of two sites. The pottery at Grass Valley Creek K (#34) was divided into Type I and Type II on the basis of temper; and the pottery at Old Skull Creek Village (#41) was divided into Types I, II, and III due to variations in temper, color, and thickness.

Over the years Molly Magee Knudtsen donated sherds to the Smithsonian Institution and allowed other archaeologists to remove sherds from the collection for comparative analysis. As a result there are discrepancies between the number of sherds Magee (1964, 1967) reported at sites and the number of sherds at the same sites in this report.

Clay

The clay used to construct the pots was obtained at local sources. Clay deposits are common in the vicinity of the cold springs, hot springs, and the streams, which are scattered along the land across the valley floor. cursory analysis of clay from six deposits did not allow for determination of the exact clay source for each of the sherds, but it did reveal that mica, sand, and quartzite particles were present in varying amounts in the clay at four of the deposits. These elements were absent from the clay at the other two deposits.

This situation, if true for all of the clay sources, indicates that Coale's (1963:1–2) assertion that many of the Shoshoni Brownware pots are devoid of added temper is correct. In other words, the Sho-

shoni Indians used the clay as it came from the ground and did not feel the need to add elements in order to strengthen or alter the consistency of the clay.

Grasses are quite common at the clay deposits which frequently occur near water. When removing the clay, I discovered that it is very difficult to avoid collecting these grasses with the clay. The Shoshoni must have encountered the same problem because the sherds from seven sites contained carbonized and uncarbonized plant remains—1) Cortez Canyon (#1), 2) McCluskey Creek B (#4), 3) McCluskey Creek D (#6), 4) Cowboy Rest B (#12), 5) Skull Creek A (#16), 6) Grass Valley Creek B (#25), and 7) Grass Valley Creek E (#28). Therefore the presence of these plant remains indicates that the clay was not systematically cleaned, after it was removed from the ground.

Temper

Temper in this discussion refers to any particles in the clay. As the previous discussion pointed out, temper may not have been purposefully added to the clay. The analysis of the temper in the sherds was done by magnification, not thin sections. Eight types of temper were identified. Table 3 presents the temper types and their distribution by site.

Type 6, small granitic particles, is the most common temper, present at 16 sites. Surprisingly, at 12 sites temper is completely absent in the sherds (Type 0). Coarse granitic particles (Type 8) appeared in the sherds from 10 sites. The next most frequent type was Type 2, small sand particles, which is present at nine sites. Type 4, mica and quartzite, and Type 7, medium granitic particles, are evident in the sherds from three sites. Type 3, coarse sand particles, and Type 5, mica, quartzite and coarse sand, each occur at only one site.

The consistency of temper types at the sites indicates that the people at each site were utilizing specific clay sources, probably the deposits nearest to the site. Type 0 through 5 are clays that did not require the addition of temper. Types 6 through 8 contain granitic particles and represent the purposeful addition of the ground rocks.

The distribution of the temper types is interesting. The sherds from all but one of the sites, 1 through 7 in the north end of the valley and all of the Skull Creek sites (16 through 22), contain temper that was added to the clay. Only one of these sites is located on the valley floor. Possibly the clay sources in the lower foothills and the pinyon-juniper zone have a clay that requires additional particles when it is used to make vessels. Looking at the data another way, eight of the 10 sites in the pinyon-juniper zone had purposeful temper. If the pinyon-juniper zone used to be lower, the Skull Creek sites would fit into this

pattern. On the other hand, the distribution of temper types on the valley floor is mixed with no apparent pattern and the situation in the pinyon-juniper zone may change after more of the area is surveyed.

Construction

In terms of construction, the Grass Valley pottery was shaped by hand and there is strong evidence that coil construction was predominant in the region. Sherds from twelve of the sites showed visible evidence of this technique (Table 4). At six of the 12 sites the pottery had cracks where the coils had not been completely smoothed away. However, the coils on the sherds from the other six sites could be measured and they range from .8 cm to 2.5 cm in width (Fig. 4a, b). Variation in the size of a coil on a single sherd was .5 cm.

The sherds from the other sites also appeared to be coiled rather than modeled. Frequently on the exterior or interior ripples appear where the coils had been obliterated but not completely flattened. A paddle and anvil technique may have been used to smooth the coils and shape some of the vessels but this cannot be documented. In certain cases the coils were smoothed irregularly and look to have been done by hand. Because most of the coils are visible on the interior of a sherd, the appearance of the exterior was more important to the pottery. However, it should be noted that most sherds had been smoothed completely.

None of the sherds in the sample had basketry impressions. Because the collection is quite large, it seems safe to assume that the pots were not shaped and smoothed in baskets.

Finish

After the pot was shaped it was finished by smoothing and wiping the surface by hand. At this time a light wash was applied to some of the vessels. As Table 5 demonstrates most of the sherds were well smoothed on the exterior and interior. However, in some cases one side was given preferential treatment. Sherds from eight sites were poorly finished with both surfaces left very uneven.

Wiping marks are frequent and are visible on the sherds from 35 sites (Table 5). The wiping marks were produced by the potter wiping the clay either with a hand or with grass, which left striations on the clay. Wiping direction was quite variable. At three sites, Cowboy Rest A (#11), Grass Valley Creek F (#29), and Rocky Point B (#44), the vessel was wiped diagonal to the rim on the interior and exterior. Wiping marks were parallel to the rim on the inside and perpendicular to the rim on the outside at nine sites—McCluskey Creek A (#3), McCluskey Creek E (#7), Cowboy Rest C (#13), Grass Valley Creek

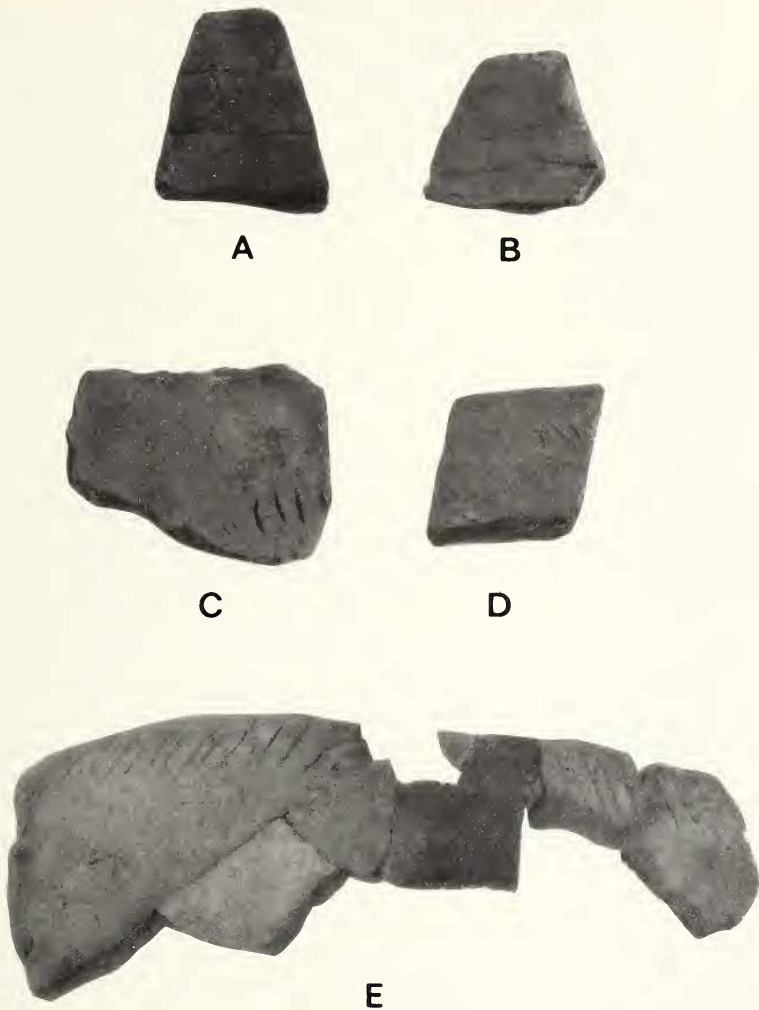


Fig. 4.—A and B are examples of coils still visible on the sherds (actual size). C and D are examples of indented decoration (actual size). E is an example of incision decoration (actual size).

sites A (#24), H (#31), K (#34) and P (#39), Old Skull Creek Village (#41), Dead Pile Village (#42) and Grass Valley Tom A (#49). At Skull Creek D (#19), one sherd had been wiped in several different directions.

Table 5.—*Surface finish and wiping marks on pottery from Grass Valley, Nevada.*

Site name and no.	Inside			Outside		
	Smooth	Uneven	Wiping marks	Smooth	Uneven	Wiping marks
1. Cortez Canyon	x	—	—	x	—	—
2. Hot Springs Point	x	—	—	x	—	x
3. McCluskey Creek A	x	—	x	x	—	x
4. McCluskey Creek B	x	—	—	x	—	—
5. McCluskey Creek C	x	—	—	x	—	—
6. McCluskey Creek D	x	—	—	x	—	—
7. McCluskey Creek E	x	—	—	x	—	—
8. Stink Hole A	—	x	—	x	—	—
9. Stink Hole B	x	—	x	x	—	—
10. Corral Canyon	x	—	—	x	—	—
11. Cowboy Rest A	x	—	x	x	—	x
12. Cowboy Rest B	x	—	x	—	x	x
13. Cowboy Rest C	—	x	x	x	—	x
14. Cowboy Rest D	x	—	x	x	—	x
15. Rosebush Bowl	x	—	—	x	—	—
16. Skull Creek A	x	—	x	x	—	x
17. Skull Creek B	x	—	—	x	—	—
18. Skull Creek C	x	—	x	x	—	x
19. Skull Creek D	—	x	—	x	—	—
20. Skull Creek E	—	x	x	—	x	x
21. Skull Creek F	—	x	x	—	x	x
22. Skull Creek G	x	—	—	x	—	—
23. Pottery Hill B	x	—	x	x	—	x
24. Grass Valley Creek A	—	x	x	—	x	x
25. Grass Valley Creek B	x	—	x	—	x	—
26. Grass Valley Creek C	x	—	—	x	—	—
27. Grass Valley Creek D	x	—	x	—	x	x
28. Grass Valley Creek E	x	—	—	x	—	x
29. Grass Valley Creek F	—	x	—	x	—	x
30. Grass Valley Creek G	—	x	—	—	x	—
31. Grass Valley Creek H	—	x	x	—	x	x
32. Grass Valley Creek I	x	—	—	x	—	—
33. Grass Valley Creek J	x	—	x	—	x	—
34. Grass Valley Creek K	x	—	x	—	x	x
35. Grass Valley Creek L	x	—	—	x	—	—
36. Grass Valley Creek M	x	—	—	x	—	—
37. Grass Valley Creek N	—	x	—	x	—	—
38. Grass Valley Creek O	—	x	—	x	—	—
39. Grass Valley Creek P	x	—	x	x	—	x
40. Grass Valley Creek Q	x	—	—	x	—	—
41. Old Skull Creek Village	x	—	—	x	—	—
42. Dead Pile Village	x	—	x	—	x	x
43. Rocky Point A	x	—	x	—	x	x
44. Rocky Point B	—	x	x	x	—	x
45. Rocky Point C	x	—	x	x	—	x
46. Rocky Point D	—	x	x	—	x	x
47. Rocky Point E	—	x	—	—	x	—

Table 5.—*Continued.*

Site name and no.	Inside			Outside		
	Smooth	Uneven	Wiping marks	Smooth	Uneven	Wiping marks
48. Rocky Point F	—	x	x	—	x	x
49. Grass Valley Tom A	x	—	x	—	x	x
50. Grass Valley Tom B	x	—	x	—	x	x
51. Grass Valley Tom C	x	—	x	—	x	—
52. Grass Valley Tom D	x	—	x	x	—	x
53. Grass Valley Tom E	x	—	x	x	—	x
54. Grass Valley Tom F	—	x	—	x	—	—
55. Ridge Valley South	x	—	x	—	x	—
56. Steiner Canyon	x	—	x	—	x	x
57. Cahill Canyon	x	—	x	x	—	x

Decoration

Decoration was applied to the vessels before firing. The only decorative elements on the Grass Valley sherds are indentations and incisions. Paint was not used. Decorated sherds came from four sites—Cowboy Rest B (#12), Cowboy Rest D (#14), Grass Valley Creek A (#24) and Rocky Point A (#43).

The sherd from Cowboy Rest B is a body sherd. It has four fingernail indentations, 4 mm apart and 5 mm long (Fig. 4c). Cowboy Rest D produced two decorated rim sherds from two different vessels, both flat-bottomed, truncated cones. One sherd has three fingernail indentations, 2 to 3 mm apart, 3 to 4 mm long. These indentations are 8 mm below the rim (Fig. 4d). The other sherd is similar. It has five fingernail incisions which are 2 mm apart. They begin 4 mm below the rim and then arc towards the rim. These indentations are slightly smaller than the previous example.

The six decorated sherds from Grass Valley Creek A are from the same vessel, another flat-bottomed truncated cone (Fig. 4e). Twenty-six incisions extend down from the rim and vary between 4 mm and 7 mm in length. These lines were produced by using an implement such as a small piece of wood.

The sherd from Rocky Point A is a decorated rim sherd. The 12 incisions are adjacent to the rim for a distance of 3.8 cm. They are 3 to 4 mm long, and are 1 to 7 mm apart, perpendicular to the rim.

Firing

One of the distinctive characteristics of Shoshonean tradition ceramics is that they were fired at a low temperature. The variability of color which can frequently be seen on one pot or sherd indicates that

Table 6.—*Perforated sherds from Grass Valley, Nevada. Diameters given in mm.*

Site	Inside diameter	Outside diameter	Complete hole
6. McCluskey Creek D	45	90	X
	41	90	X
	40	90	—
	40	90	—
39. Grass Valley Creek P	40	68	X
	40	75	X
57. Cahill Canyon	60	68	—

the open firing was not controlled, resulting in the uneven coloration. The effects of later use over a fire as a cooking vessel are sometimes difficult to distinguish from the initial firing.

The colors of the sherds from the sites are so inconsistent that it is not feasible to present a breakdown of the colors by site. In general terms the sherd colors varied from buff to light and dark brown with or without reddish hues, to light and dark grey, and black. Most of the sherds had a greyish cast, the result of a reduced atmosphere during firing. Carbon streaks were visible on some of the sherds at Grass Valley Creek L (#35) and Dead Pile Village (#42).

Polishing

The ceramics from six sites were polished after the firing—McCluskey Creek D (#6), Skull Creek B (#17), Skull Creek C (#18), Skull Creek E (#20), Grass Valley Creek L (#35), and Rocky Point B (#44). The polishing was very distinct and probably done with a small stone.

Perforations

The seven perforated sherds in the collection came from three sites—McCluskey Creek D (#6), Grass Valley Creek P (#39), and Cahill Canyon (#57). The holes were made after the vessel was fired. The inside diameter of the holes is always smaller than the outside diameter which means the holes were drilled from the outside towards the inside (Table 6).

Two of the sherds from McCluskey Creek D and the sherd from Cahill Canyon are interesting because the drilling was stopped before completing the hole. Incomplete drill holes reflect that the project was abandoned or that the incomplete holes were designed for a specific purpose. If they are the result of abandonment they may indicate that the vessel broke or was about to break during the drilling process and

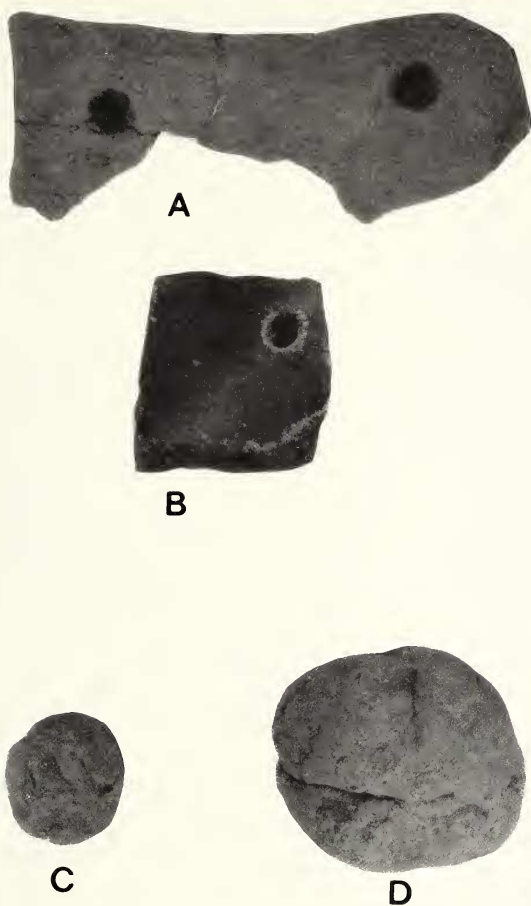


Fig. 5.—A and B are examples of conical perforations (actual size). C and D are mud balls (actual size).

could not be repaired. However, they may be purposeful constructions because they comprise 43% of the sample. The only explanation this author can suggest is that the holes could have served as receptacles for sticks which were then used to lift the vessel when it was hot.

The purpose of the completed holes has been disputed. Magee (1967) suggested that the perforated sherds were fragments of a colander. In support of Magee's interpretation is the fact that five of the seven perforated sherds are body sherds. On the other hand, the practice of

Table 7.—*Distribution of sherds in Grass Valley, Nevada, according to thickness.*

Site	Number
<i>1 mm</i>	
22. Skull Creek G	1
Total	1
<i>4 mm</i>	
2. Hot Springs Point	103
29. Grass Valley Creek F	2
45. Rocky Point C	23
47. Rocky Point E	3
56. Steiner Canyon	48
Total	179
<i>5 mm</i>	
8. Stink Hole A	1
9. Stink Hole B	9
16. Skull Creek A	11
21. Skull Creek D	86
27. Grass Valley Creek D	12
34. Grass Valley Creek K	233
41. Old Skull Creek II	76
43. Rocky Point A	199
47. Rocky Point E	2
Total	629
<i>6 mm</i>	
3. McCluskey Creek A	8
5. McCluskey Creek C	17
10. Corral Canyon	5
11. Cowboy Rest A	23
12. Cowboy Rest B	12
13. Cowboy Rest C	68
14. Cowboy Rest D	1
15. Rosebush Bowl	2
17. Skull Creek B	6
18. Skull Creek C	6
19. Skull Creek D	28
23. Pottery Hill B	4
26. Grass Valley Creek C	81
30. Grass Valley Creek G	156
31. Grass Valley Creek H	53
32. Grass Valley Creek I	16
33. Grass Valley Creek J	27
35. Grass Valley Creek L	9
36. Grass Valley Creek M	46
40. Grass Valley Creek Q	4
41. Old Skull Creek I	41
42. Dead Pile Village	107
47. Rocky Point E	2

Table 7.—Continued.

Site	Number
48. Rocky Point F	8
50. Grass Valley Tom B	131
51. Grass Valley Tom C	56
52. Grass Valley Tom D	40
53. Grass Valley Tom E	65
54. Grass Valley Tom F	53
55. Ridge Village South	4
Total	1035
<i>7 mm</i>	
4. McCluskey Creek B	46
6. McCluskey Creek D	53
7. McCluskey Creek E	57
18. Skull Creek C	3
23. Pottery Hill B	6
41. Old Skull Creek III	58
42. Dead Pile Village	178
46. Rocky Point D	8
49. Grass Valley Tom A	202
50. Grass Valley Tom B	55
57. Cahill Canyon	39
Total	705
<i>8 mm</i>	
1. Cortez Canyon	32
23. Pottery Hill B	6
25. Grass Valley Creek B	19
28. Grss Valley Creek E	15
37. Grass Valley Creek N	46
38. Grass Valley Creek O	65
39. Grass Valley Creek P	231
42. Dead Pile Village	104
44. Rocky Point B	19
49. Grass Valley Tom A	331
Total	868
<i>9 mm</i>	
24. Grass Valley Creek A	36
38. Grass Valley Creek O	49
42. Dead Pile Village	16
Total	101
<i>10 mm</i>	
23. Pottery Hill B	1
Total	1

Table 8.—*Distribution of rim types of pottery from Grass Valley, Nevada.*

Site no.	Types																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
3.	1																
4.	4	1															
6.	12																
7.	2		1	2													
9.							1								1		
11.	8			2													1
12.								1	1								
13.				2	3	1											1
21.	1	1			2												
23.	1																
24.	9	4	3														
26.		2															
28.							2					1					
29.													1				
31.	1					4											
32.	2																
33.	4																
38.		8	4	1													
39.	3																
41. (I)	21																
(II)	2																
42.	5																
43.	1		1														
44.	1																
47.	1																
49.	5		3														
51.*	2																
52.	2																
53.	2																
57.	4				1					1					1		
Total	94	16	8	7	6	5	3	1	1	1	1	1	1	1	1	1	1

* Rim sherd too small to categorize.

mending pottery and other artifacts by perforating an object and sewing the holes together is well known among North American Indians.

Thickness

The sherds in the collection ranged in thickness from 1 mm to 10 mm; the majority were between 5 and 8 mm (Table 7).

VESSEL SHAPES

The vessel shapes known for the Shoshonean tradition are 1) flat bottomed vessels with straight, oval and flaring profiles; 2) bowls with

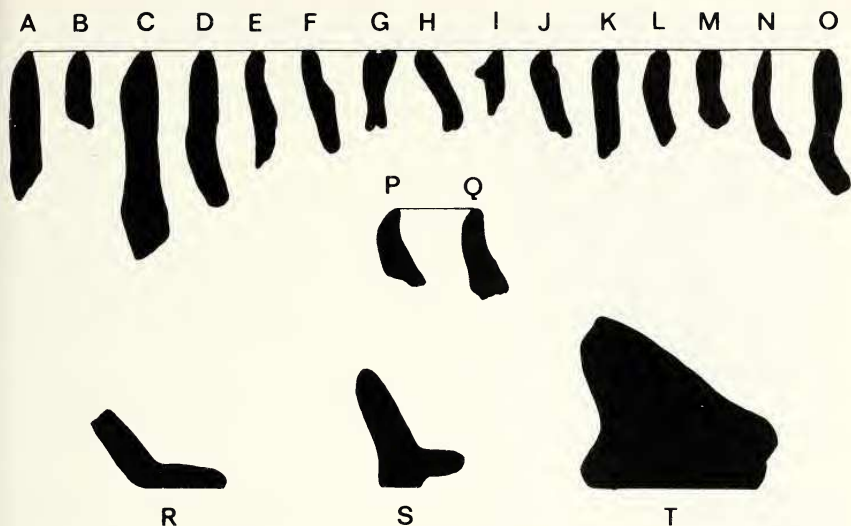


Fig. 6.—A through Q are rim sherds (actual size). R through T are base sherds (actual size).

round bottoms; and 3) pointed bottom vessels with an oval profile. Flat bottom and round bottom vessels from Grass Valley have already been published. Magee (1964) illustrated the flat bottom, flaring sided vessel from Grass Valley Tom A (#49). Deatrick (1978) described a round base vessel from the area near Skull Creek.

Rim Sherds

The 153 rim sherds were divided into 17 rim types (Fig. 6a through q; Table 8). Reconstruction of a vessel shape solely on a rim sherd is difficult because few whole Shoshoni pots have ever been illustrated and the actual range of variation is unknown. However, the two most frequent rim types, A and B, and rim type I should be fragments of a straight sided, flat bottom vessel. Their diameters range from 18 to 26 cm. Types C, E, and K are from vessels which had neither very straight nor flaring sides but were somewhere in between. The diameters on these pots vary between 22 and 26 cm. The flaring sided, flat bottom vessels with diameters between 24 and 26 cm, are types F, H, and J. Types D and L through Q are from round sided vessels with diameters between 18 and 26 cm. Type G could not be assigned to a specific category. In terms of frequency, straight sided vessels were by far the most common (121 rim sherds). The almost straight sided vessels were the next most frequent type (15 rim sherds). Thirteen rim

Table 9.—*Distribution of base types in Grass Valley, Nevada—Type 1 is Fig. 6r; Type 2 is Fig. 6s; Type 3 is Fig. 6t; and Type 4 is a rounded base (not illustrated).*

Site	Base types			
	1	2	3	4
3. McCluskey Creek A	1	1		
7. McCluskey Creek E	2		1	
15. Rosebush Bowl	1			
21. Skull Creek F	1		1	
23. Pottery Hill	3			
30. Grass Valley Creek G				3
32. Grass Valley Creek I				1
38. Grass Valley Creek O	4			
42. Dead Pile Village	5			
49. Grass Valley Tom A	12			3
Total	29	1	2	7

sherds belonged to round sided vessels and seven came from flaring sided pots.

Base Sherds

The 39 base sherds were divided into four types of bases (Table 9). Type 1 (Fig. 6r) is the most frequent in the sample. It is a flat bottom with sides that flair at the base. Type 1 have diameters between 10 and 12 cm. Only one base of type 2 (Fig. 6s) was found. This is a ring base with flaring sides that had a 6 cm diameter. Type 3 (Fig. 6t) is an angular, flat bottom base with flaring sides. The two examples of this type are 6 and 7 cm in diameter. Type 4, a round base, is the second most common type of base sherd.

Vessel Use

Determining the use of a vessel is a difficult endeavor unless a pot is discovered filled with remains or shows evidence of exposure to a cooking fire. The first situation was not encountered in Grass Valley. However, sherds from thirteen sites contained carbonized remains adhering to their interior; and sherds from five sites showed fire-blackening which was not related to their initial firing. This evidence demonstrates that the primary function of many of the pots was as a cooking utensil.

OTHER ARTIFACTS

Two other types of artifacts were collected at the sites, projectile points and mud balls. Twenty-four projectile points were found at the Shoshoni pottery sites (Table 10). Direct association between the pro-

Table 10.—*Projectile point types from Grass Valley, Nevada.*

Site	Type
1. Cortez Canyon	1 Elko Eared
2. Hot Springs Point	1 Desert Side-Notched
8. Stink Hole A	2 Rose Spring Corner-Notched
12. Cowboy Rest B	1 Elko Eared
	1 Desert Side-Notched
21. Skull Creek E	1 Rose Spring Corner-Notched
24. Grass Valley Creek A	1 Elko Eared
31. Grass Valley Creek H	1 Cottonwood Triangle
32. Grass Valley Creek I	2 Eastgate Expanding Stem
41. Old Skull Creek Village	5 Rose Spring Corner-Notched
	1 Desert Side-Notched
44. Rocky Point B	1 Rose Spring Corner-Notched
52. Grass Valley Tom D	2 Elko Eared
	1 Rose Spring Corner-Notched
56. Steiner Canyon	2 Elko Eared
	1 Desert Side-Notched
Total	24

jectile points and the pottery cannot be established because these artifacts were recovered from surface scatters. Nevertheless, it is important to note the occurrence of the projectile point types in case future researchers find a similar pattern between the projectile points and the pottery.

There are five different types of projectile points from eleven sites (Table 10)—seven, Elko Eared; two, Eastgate Expanding Stem; 10, Rose Spring Corner-Notched; four, Desert Side-Notched; one, Cottonwood Triangle. The chronological ordering of the point types, presented below, is based upon Clewlow's (1967:144), O'Connell's (1967:133-134), Fowler's (1968b:30), and Hester's (1973) work. The Elko series is generally thought to end around 600 A.D., about 400 to 600 years before the presently accepted date of the initial manufacture of Shoshoni Brownware in the Great Basin. The association of seven points of the Elko series with pottery may be accidental but it also raises the possibility that Shoshoni Brownware might have been introduced into the region at an earlier time.

The transition between the Eastgate and Rose Spring points (600-1000 A.D.) and the Desert Side-Notched and Cottonwood points (1000-1700 A.D.) is presumed to correlate with the migration of Numic speakers into the Great Basin, who are credited with the introduction of ceramics to the area. Therefore, the association of Eastgate and Rose Spring points with Shoshoni pottery is not controversial because

such a replacement was probably a long process. Four Desert Side-Notched and one Cottonwood Triangle were associated with the ceramics. This correlates with the accepted pattern of the association of Shoshoni Brownware with these point types (Thomas, 1970:696).

Three fired mud balls were found in Grass Valley and all are slightly irregular. One mud ball which was found at Grass Valley Tom B (#50), weighs 8.7 g and has a diameter that ranges between 1.8 cm and 2.1 cm (Fig. 5c). The remaining two examples are from the McCluskey Creek drainage. The ball from McCluskey Creek B (#4) weighs 52.5 g and is 3.5 cm in diameter (Fig. 5d). The other mud ball is from McCluskey Creek D (#6) and weighs 54 g and has a diameter of 3.9 cm.

Fired mud balls are generally thought to have been used as cooking stones. However, none of these balls showed evidence of carbonized remains. Rocks are common in Grass Valley and would have functioned better in this capacity. Most likely, the mud balls were used as gaming pieces.

CONCLUSIONS

Grass Valley, Nevada, has produced a large sample of Shoshoni archaeological sites with ceramic remains. These sites indicate that Shoshoni occupation of the region was extensive and possibly focused, to a greater extent than in other valleys, below the pinyon-juniper ecozone.

The analysis of the ceramics reveals that Shoshoni ceramic technology in Grass Valley is comparable to other regions of the Great Basin. The clays utilized for vessel production were extracted from local deposits. Coil construction was dominant in the area but the potters executed the finishing touches in their own fashion.

The diversity in the location and the types of archaeological sites with Shoshoni pottery in Grass Valley, as well as the large quantity of ceramics they contained, substantially increase our understanding of Shoshoni settlement patterns and the integral role ceramics played in their society.

ACKNOWLEDGMENTS

I wish to express my gratitude to Molly Magee Knudtsen for allowing me to analyze the collection and for spending many hours with me during my fieldwork. Her insights and knowledge of the prehistory of the valley were invaluable. Special thanks are extended to the directors of the Grass Valley Project, Dr. C. W. Clewlow, Jr., and Dr. Richard Ambro, and to Helen Fairman Wells for their assistance and encouragement at all stages of the project. Paul Bouey worked on the ceramic analysis; Margaret Adams prepared the photographs; Suzanne Bartholomae and Debi Owen assisted during the preparation of the manuscript.

LITERATURE CITED

- BOUEY, P. 1979. The validity of surface lithic assemblages. *New World Arch.*, 3(3): 16-28.
- CLEWLOW, C. W., JR. 1967. Time and space relations of some Great Basin Projectile Point Types. *Univ. California Arch. Survey Rep.*, 70:141-149.
- CLEWLOW, C. W., JR., R. AMBRO, AND A. PASTRON. 1972. The horse pasture villages. *Nevada Arch. Survey, Res. Paper*, 3:69-84.
- CLEWLOW, C. W., JR., AND A. PASTRON. 1972. Preliminary investigations. *Nevada Arch. Survey, Res. Paper*, 3:11-32.
- CLEWLOW, C. W., JR., H. F. WELLS, AND R. AMBRO (eds.). 1978. History and prehistory at Grass Valley, Nevada. *Monogr. Inst. Arch.*, Univ. California-Los Angeles, 7:1-173.
- CLEWLOW, C. W., JR., AND M. RUSCO (eds.). 1972. The Grass Valley Archeological Project: collected papers. *Nevada Arch. Survey, Res. Paper*, 3:1-149.
- COALE, G. 1963. A study of Shoshonean pottery. *Tebiwā*, 6(2):1-12.
- DEATRICK, S. 1978. Another earthenware vessel from Grass Valley, Nevada. *Monogr. Inst. Arch.*, Univ. California-Los Angeles, 7:135-140.
- ELSASSER, A. 1960. The archaeology of the Sierra Nevada in California and Nevada. *Univ. California Arch. Survey Rep.*, 51:1-93.
- FOWLER, D. 1968a. Archeological survey in eastern Nevada. *Tech. Rep. Ser.*, Desert Res. Inst., 2:1-39.
- . 1968b. The archaeology of Newark Cave, White Pine County, Nevada. *Tech. Rep. Ser.*, Desert Res. Inst., 3:1-60.
- HECTOR, S. 1978. An early basalt site located in an historic Shoshoni village. *Monogr. Inst. Arch.*, Univ. California-Los Angeles, 7:141-160.
- HESTOR, T. 1973. Chronological ordering of Great Basin prehistory. *Contrib. Univ. California Arch. Res. Facility*, 17:1-199.
- MAGEE, M. 1964. A flat-bottomed earthenware vessel from central Nevada. *Amer. Antiquity*, 30:96-97.
- . 1967. A report on perforated sherds from central Nevada with a tentative suggestion for their use. *Amer. Antiquity*, 32:226.
- O'CONNELL, J. F. 1967. Elko Eared/Elko Corner-Notched Projectile Points as time markers in the Great Basin. *Univ. California Arch. Survey Rep.*, 70:129-140.
- PASTRON, A. 1972. Excavation of two rock shelters. *Nevada Arch. Survey, Res. Paper*, 3:33-68.
- PAYEN, L. 1978. Smoothshod-roughshod, an analysis of the farriery and other horse equipment from two historic Shoshoni village sites in Grass Valley, Nevada. *Monogr. Inst. Arch.*, Univ. California-Los Angeles, 7:83-104.
- RIDDELL, H. 1951. The archaeology of a Paiute village site in Owens Valley. *Univ. California Arch. Survey Rep.*, 12:14-28.
- ROSEN, M. 1978. Faunal remains as indicators of acculturation in the Great Basin. *Monogr. Inst. Arch.*, Univ. California-Los Angeles, 7:35-82.
- THOMAS, D. 1970. Review of D. Fowler 1968a, 1968b. *Amer. Anthro.*, 72:696-697.
- TUOHY, D. 1965. Shoshoni ware from Idaho. *Davidson J. Anthro.*, 2(1):55-71.
- WALLOF, K. 1978. A three-sided structure from Grass Valley, Lander County, Nevada. *Monogr. Inst. Arch.*, Univ. California-Los Angeles, 7:119-134.